CLAIMS

1. An antimicrobial peptide, named myticin, characterized in that it can be obtained from a bivalve mollusk, and in that

- its molecular mass is approximately 4.5 kDa;
- its pI is approximately 8.7;
- it comprises 8 cysteine residues.

2. The peptide as claimed in claim 1, characterized in that it comprises the following sequence (I):

$HX_1HX_2CTSYX_3CX_4KFCGTAX_5CTX_6YX_7CRX_8LHX_9GKX_{10}CX_{11}CX_{12}HCSR$ (I)

in which: X_1 = P or S, X_2 = V or A, X_3 = Y or W, X_4 = S or G, X_5 = S or G, X_6 = R or H, X_7 = G or L, X_8 = N or V, X_9 = R or P, X_{10} = L or M, X_{11} = F or A, and X_{12} = L or V.

3. The peptide as claimed in claim 2, chosen from the group consisting of:

- a peptide comprising the following sequence (Ia):

HSHACTSYWCGKFCGTASCTHYLCRVLHPGKMCACVHCSR (Ia)

- a peptide comprising the following sequence (Ib):

HPHVCTSYYCSKFCGTAGCTRYGCRNLHRGKLCFCLHCSR (Ib).

4. A nucleic acid comprising a sequence encoding the peptide as claimed in any one of claims 1 to 3.

5. A method for producing the nucleic acid as claimed in claim 4, characterized in that it comprises screening a nucleic acid library using a fragment of more than

15 bp of the coding region of a sequence chosen from SEQ ID NO: 1 and SEQ ID NO: 3.

6. An expression cassette comprising at least one nucleic acid sequence as claimed in claim 4, under the transcriptional control of a suitable promoter.

7. A recombinant vector, characterized in that it comprises at least one nucleic acid sequence as claimed in claim 4.

8. A prokaryotic or eukaryotic cell transformed with a nucleic acid sequence as claimed in claim 4.

9. A method for producing the peptide as claimed in any one of claims 1 to 3, characterized in that it comprises expressing a nucleic acid as claimed in claim 4, in at least one transformed cell as claimed in claim 8.

10. The use of the peptide as claimed in any one of claims 1 to 3, for producing an antimicrobial agent.

ADD A4